



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,786	07/31/2001	Jonathan Peter Buckingham	30008396-1	1431

7590 02/06/2004

LOWE HAUPTMAN GILMAN
& BERNER, LLP
Suite 310
1700 Diagonal Road
Alexandria, VA 22314

EXAMINER

DAVIDSON, DAN

ART UNIT	PAPER NUMBER
----------	--------------

2651

DATE MAILED: 02/06/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,786

Applicant(s)

BUCKINGHAM, JONATHAN
PETER

Examiner

Dan I Davidson

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-7,9,17,18,22-24,29,30,34 and 35 is/are rejected.
- 7) ☒ Claim(s) 1-6,8-16,18-21,23,25-28,30-33 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1, 3, 5-6, 9-10, 12-14, 16, 18, 23, 30, and 35 are objected to because of the following informalities:

(1) In claim 1, line 2, the first instance of "set" should be replaced with --said--.

(2) In claim 1, line 3, "each said set being arranged into datasets" should be replaced with --datasets arranged from the at least one set--.

(3) In claim 3, line 4; claim 9, line 3; and claim 10, line 3, "a" should be deleted.

(4) In claims 5 and 12, line 3, respectively, the first instance of "a" should be deleted.

(5) In claims 6 and 23, line 2, respectively, "favour" should be replaced with --favor--.

(6) In claim 9, line 2, and claim 30, line 4, "neighbouring" should be replaced with --neighboring--.

(7) In claim 9, line 3, "data-holing" should be replaced with --data-holding--.

(8) In claims 13-14 and 16, line 2, respectively, the last instance of "a" should be deleted.

(9) In claim 18, line 3, "data-holding" should be replaced with --data holding--.

(10) In claim 18, line 4, "obtain" should be replaced with --obtaining--.

(11) In claim 23, line 2, the first instance of "a" should be replaced with --the--.

(12) In claim 35, line 6, the comma after "wherein" should be placed after "medium".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not enable a data reader with processing circuitry that is arranged to combine an earlier received set of user data with a later received substantially identical set of user data.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2651

5. Claim 1, 17-18, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Strout et al (US 4,001,883 A).

Re claims 1, 17-18, and 34; Strout et al disclose a data reader arranged to read from a data-holding medium (Fig. 1, 20, 12, 14) containing data comprising both user and non-user data (Fig. 3, 34, 32), the data being held in at least one set (a set can be defined, for example, as a track of data), and each set is arranged into datasets (Fig. 3; a dataset can be defined as a header and its associated data sectors), the non-user data holding information relating to the user data (Fig. 3, 34; col. 3, lines 15-18) and being interspersed therewith (Fig. 3, multiple headers), the data reader comprising at least one read head arranged to read the data-holding medium and to generate a data signal comprising user and non-user data (Fig. 1, 20; col. 2, lines 37-40), the non-user data being arranged to identify the user data within the sets (col. 3, lines 15-18), and processing circuitry being arranged to receive and process the data signal and obtain the user data from the data signal using the non-user data to identify the user data within the data signal (Fig. 1, 12).

6. Claims 1, 5-6, 9, 17-18, 22-23, 29-30, and 34-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Baron et al (US 6,288,862 B1).

Re claims 1, 17-18, and 34; Baron et al disclose a data reader arranged to read from a data-holding medium (col. 2, line 21) containing data comprising both user and non-user data (Fig. 1, 110, 116, 122), the data being held in at least one set (Fig. 1, 104, 106, 108), and each set is arranged into datasets (Fig. 1, 104), the non-user data holding information relating to the user data (Fig. 1, 128; col. 5, lines 24-28;

Art Unit: 2651

determination of when user data written) and being interspersed therewith (see Fig. 1), the data reader comprising at least one read head arranged to read the data-holding medium and to generate a data signal comprising user and non-user data (inferred given that user and non-user data read from the medium), the non-user data being arranged to identify the user data within the sets (Fig. 4, Block ID, WPC), and processing circuitry being arranged to receive and process the data signal and obtain the user data from the data signal using the non-user data to identify the user data within the data signal (col. 5, lines 29-57; note that blocks read into FIFO are output based on value of non-user data (write pass count)).

Re claims 5 and 22; Baron et al disclose that the processing circuitry is arranged to monitor the data signal and further arranged to determine whether a set of user data has been written to the data-holding medium a plurality of times by monitoring the non-user data within the data signal (see Fig. 4, 400, 406, same block number, different WPC; Fig. 5, 502, 504).

Re claims 6 and 23; Baron et al disclose that the processing circuitry is arranged to reject an earlier received set of user data in favor of a later substantially identical set of user data if the processing circuitry determines that the set of user data has been written to the data-holding medium a plurality of times (Fig. 5, 512).

Re claims 9 and 29; Baron et al disclose that the processing circuitry is arranged to monitor the non-user data to determine whether neighboring sets of user data being read from the data-holding medium were written in the same pass (Fig. 4; Fig. 7, 704).

Re claim 30; Baron et al disclose monitoring a portion of the non-user data that provides a numerical value representing the pass on which the set of data being read was written (Fig. 5, 502), further comprising detecting whether the numerical value is altered for neighboring sets of data (Fig. 7, 704).

Re claim 35; Baron et al disclose a data reader arranged to read a data-holding medium containing first and second markers in addition to user data (Fig. 4, 400, 406, WPC, block ID), the data reader comprising at least one read head arranged to read the data-holding medium and generate a data signal corresponding to the first and second markers, and the user data (see above), the data reader further comprising processing circuitry arranged to receive the data signal and obtain the user data from the data-holding medium, wherein the processing circuitry is arranged to identify the user data without reference to the first marker (Fig. 5, 512, 516, recording block is output after block with second (duplicate) marker is rejected).

Allowable Subject Matter

7. Claims 2-4, 8, 10-16, 19-21, 25-28, and 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Re claims 2 and 19; the prior art made of record fails to teach or suggest that the processing circuitry is arranged to occupy a state reflecting whether the data being read from the data-holding medium is in an overlap zone in which sets of data can originate from a plurality of datasets.

Art Unit: 2651

Re claim 8; the prior art made of record fails to teach or suggest that the processing circuitry is arranged to occupy a state reflecting that the user data being read from the data-holding medium is in an exclusive zone, indicating that the user data should only occur from a single dataset, once a timer arranged to time from the end of the last set of user data within a dataset has reached a predetermined value.

Re claims 13 and 27; the prior art made of record fails to teach or suggest that the processing circuitry is arranged to occupy a state reflecting that data being read from the data-holding medium is in an overwrite zone, in which a first dataset being read therefrom can be overwritten by a second dataset before the end of the first dataset is reached.

Re claim 15; the prior art made of record fails to teach or suggest a zone detector provided to interpret the non-user data and determine whether the user data is from the same dataset.

Re claim 16; the prior art made of record fails to teach or suggest processing circuitry that comprises a zone detector to interpret the non-user data and determine whether the user data is from the same dataset, and in which the zone detector is arranged so that it controls the state occupied by the processing circuitry.

Re claim 20; the prior art of record fails to teach or suggest timing from the end of the last set of user data within a dataset to ensure that no rewrites of the last or any other set of user data from that dataset are present on the data-holding medium.


Art Unit: 2651

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan I Davidson whose telephone number is (703) 308-8535. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth, can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

DID
Dan I Davidson
January 26, 2004


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600